Debian 8.0
Jessie
Installation Manual

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V 1.1 – 13. Mar. 2015
(LXDE Desktop)

You will need to note down two passwords when you follow this manual exactly.
One, the so-called „root“ or „Administrator“ password serves solely the purpose to install and delete software, and make permanent changes to the computers operating system.
The other password is the user-password, which is needed to allow access for normal daily use to the system.
This manual assumes an installation for a single-user PC, however, Linux supports up to almost 65536 users on a single computer. That is usually pretty sufficient for everything.
On Debian, and basically every Linux-based system, you can select between different „Desktops“, that is the interface you as the user work with. LXDE, which I use here for reference, resembles Windows XP, whilst KDE for example is more like Win 7 or „How Windows 8 should have been“.

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Root Password : _____

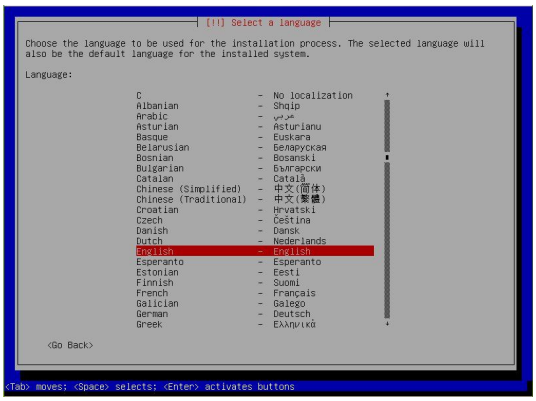
User Name : _____

User Password : _____

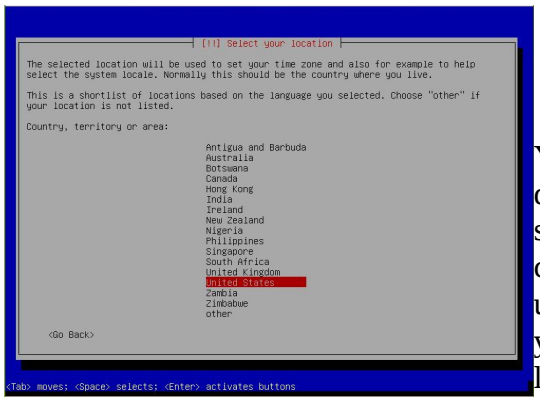
Debian Base-Installation

First we install the default Debian system.
When asked, I selected to use the LXDE desktop, the (uppermost entry) default graphical system, SSH server, print-server .. basically, the lower three items on the selection list were marked for installation. Selection is made using cursor up/down and SPACE to select / deselect.

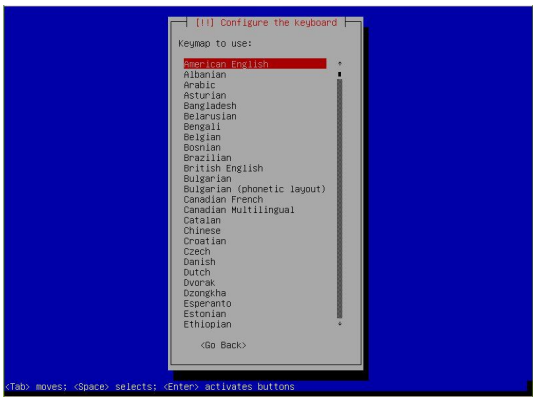
System Installation Setup

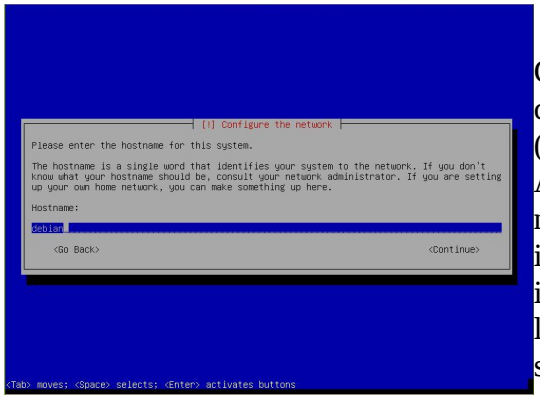


Select „Install“ using cursor up/down, then press enter. Next you select your language.

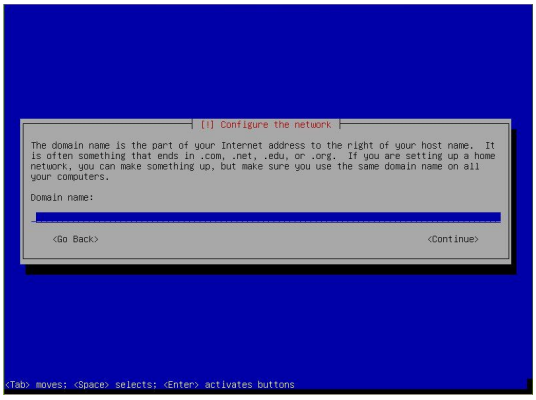


Your location defines defaults, such as the currency and units. Next select your keyboards language.

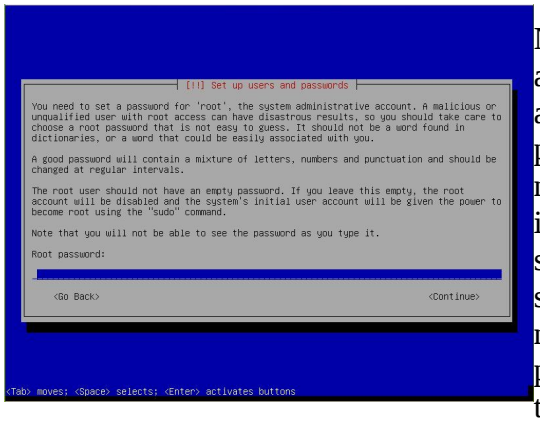



[!] Configure the network
Please enter the hostname for this system.
The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.
Hostname:
debian
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

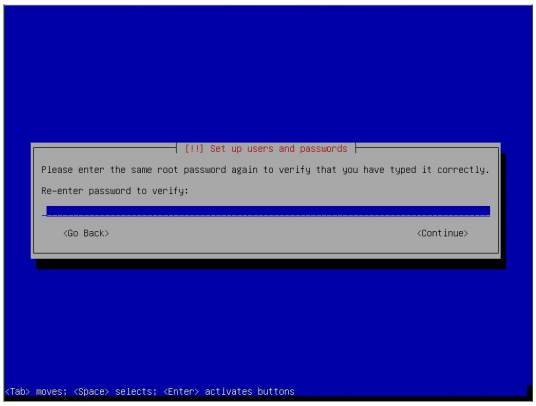
Give your computer a name (all lowercase). A domainname is not usually used in home-setups, it might even lead to problems, so leave it empty.

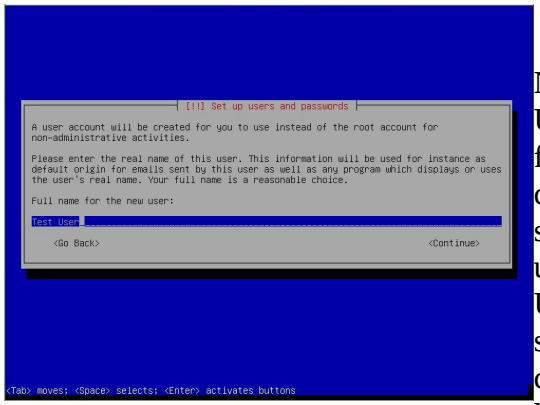

[!] Configure the network
The domain name is the part of your Internet address to the right of your host name. It is often something that ends in .com, .net, .edu, or .org. If you are setting up a home network, you can make something up, but make sure you use the same domain name on all your computers.
Domain name:
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

User Setup

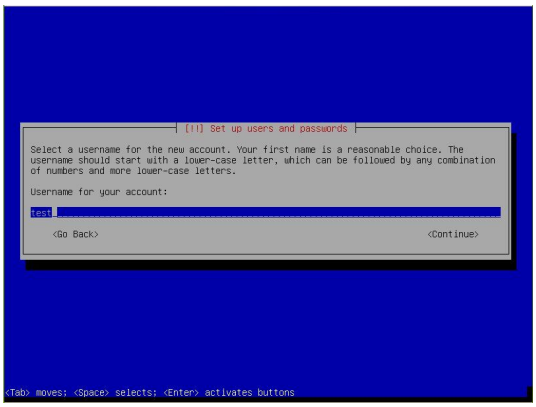

[!!] Set up users and passwords
You need to set a password for 'root', the system administrative account. A malicious or unqualified user with root access can have disastrous results, so you should take care to choose a root password that is not easy to guess. It should not be a word found in dictionaries, or a word that could be easily associated with you.
A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.
The root user should not have an empty password. If you leave this empty, the root account will be disabled and the system's initial user account will be given the power to become root using the "sudo" command.
Note that you will not be able to see the password as you type it.
Root password:
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

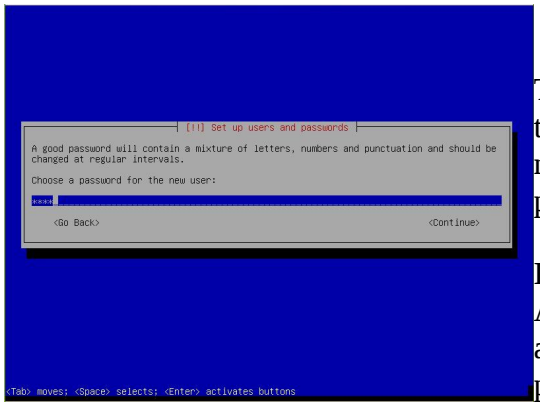
Now, enter the administrator accounts (root) password. It is needed for installing software and such. You will not see the actual password whilst typing!


[!!] Set up users and passwords
Please enter the same root password again to verify that you have typed it correctly.
Re-enter password to verify:
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons


[!!] Set up users and passwords
A user account will be created for you to use instead of the root account for non-administrative activities.
Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.
Full name for the new user:
Test User
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

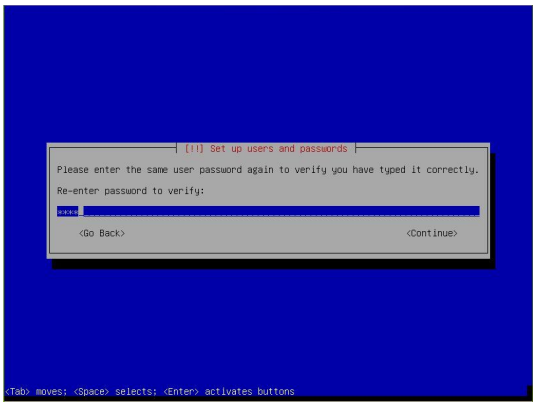
Next comes the Users realname, from which the computer suggests a username. Usernames should only contain lowercase letters.

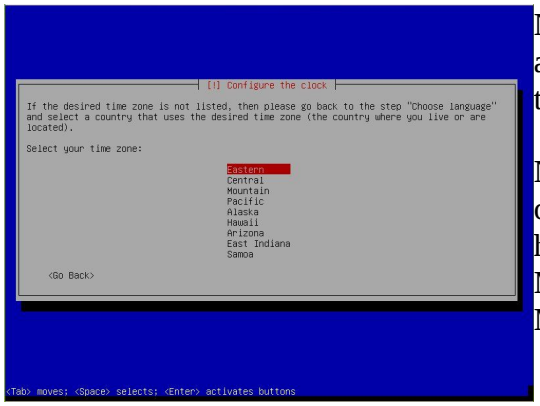

[!!] Set up users and passwords
Select a username for the new account. Your first name is a reasonable choice. The username should start with a lower-case letter, which can be followed by any combination of numbers and more lower-case letters.
Username for your account:
test
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons


[!!] Set up users and passwords
A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.
Choose a password for the new user:
****
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

The useraccount thus created needs a password, too.

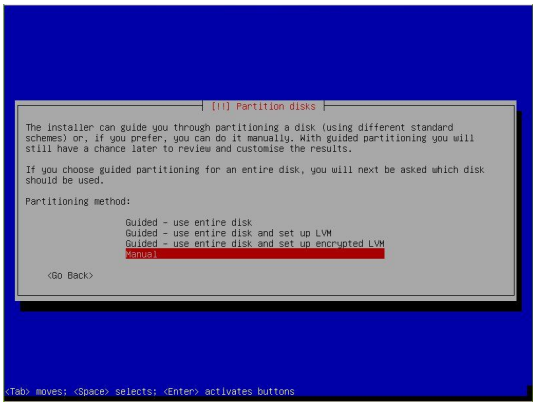
Like for the Admin / Root account, the password is not visible.


[!!] Set up users and passwords
Please enter the same user password again to verify you have typed it correctly.
Re-enter password to verify:
****
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

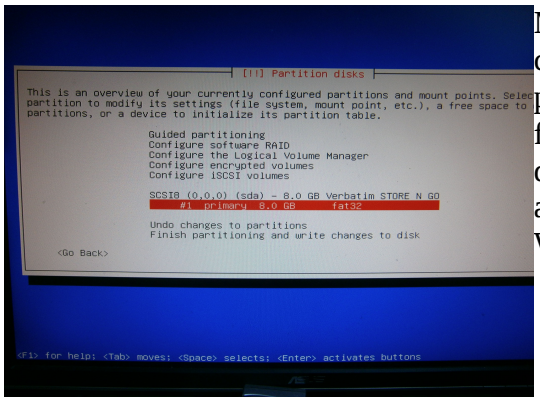

[!] Configure the clock
If the desired time zone is not listed, then please go back to the step "Choose language" and select a country that uses the desired time zone (the country where you live or are located).
Select your time zone:
Eastern
Central
Mountain
Pacific
Alaska
Hawaii
Arizona
East Indiana
Samoa
<Go Back>
<Tab> moves; <Space> selects; <Enter> activates buttons

Now we get asked for the timezone.

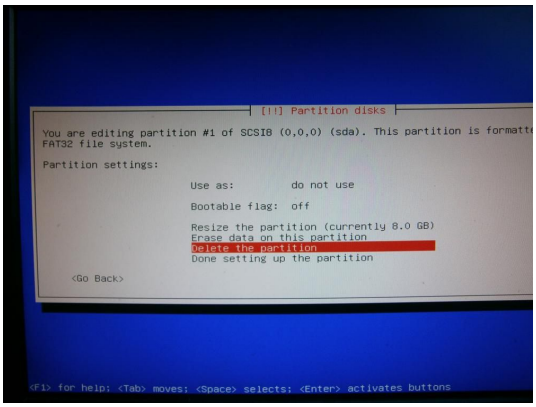
Next, we set-up our harddrive – here a Virtual Machines drive. Manually.

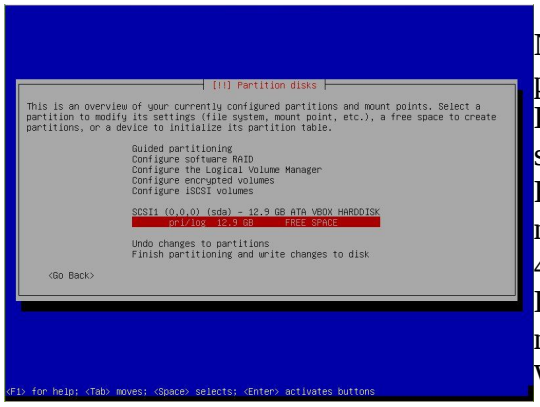

[!!] Partition disks
The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.
Partitioning method:
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual
<Go Back>
<Tab> moves; <Space> selects; <Enter> activates buttons

Partitioning

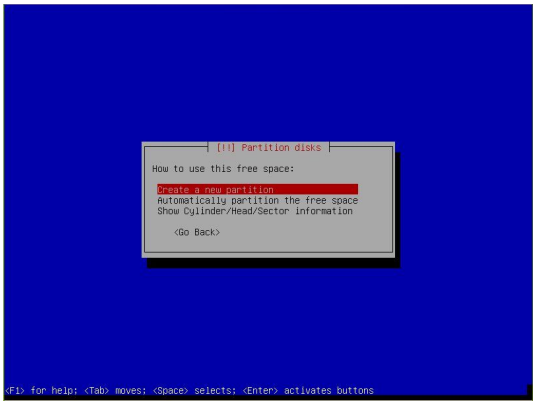

[!!] Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
Configure iSCSI volumes
SCSI0 (0,0,0) (sda) - 8.0 GB Verbatim STORE N GO
#1 primary 8.0 GB fat32
Undo changes to partitions
Finish partitioning and write changes to disk
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

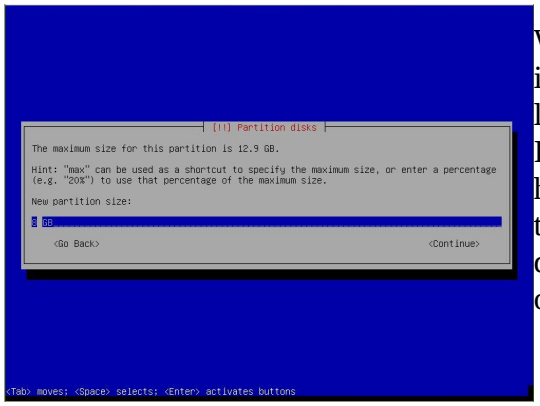
Many HDDs come with a partition already formatted. We delete that one, as it's for Windows only.


[!!] Partition disks
You are editing partition #1 of SCSI0 (0,0,0) (sda). This partition is formatted FAT32 file system.
Partition settings:
Use as: do not use
Bootable flag: off
Resize the partition (currently 8.0 GB)
Erase data on this partition
Delete the partition
Done setting up the partition
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

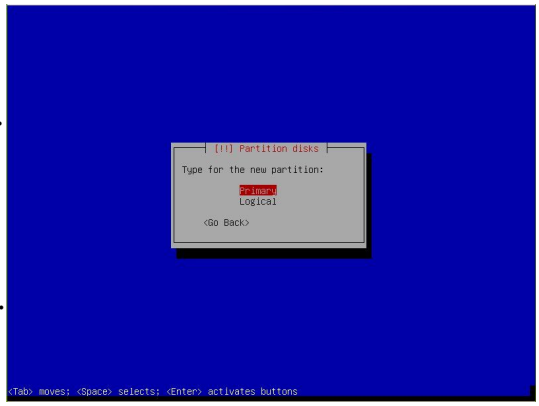

[!!] Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
Configure iSCSI volumes
SCSI1 (0,0,0) (sda) - 12.9 GB ATA VBOX HARDDISK
pri/log 12.9 GB FREE SPACE
Undo changes to partitions
Finish partitioning and write changes to disk
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

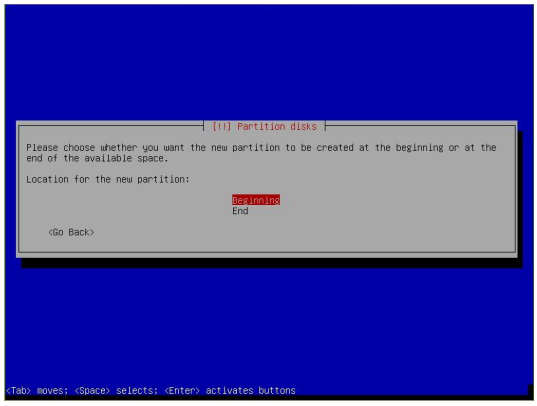
Now, we create a partition for the Linux Operating system. Recommended minimum size is 4GB for a LXDE Desktop, and a multipurpose Workstation uses 40GB to 60GB.

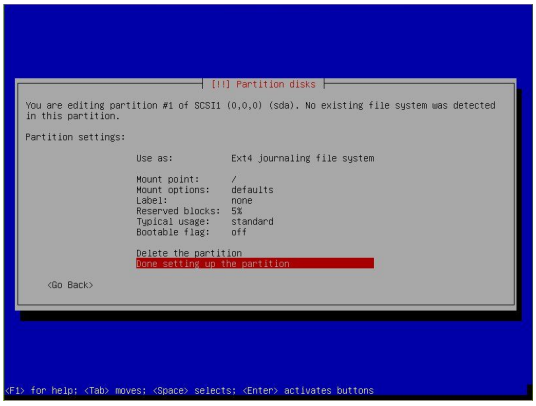

[!!] Partition disks
How to use this free space:
Create a new partition
Automatically partition the free space
Show Cylinder/Head/Sector information
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

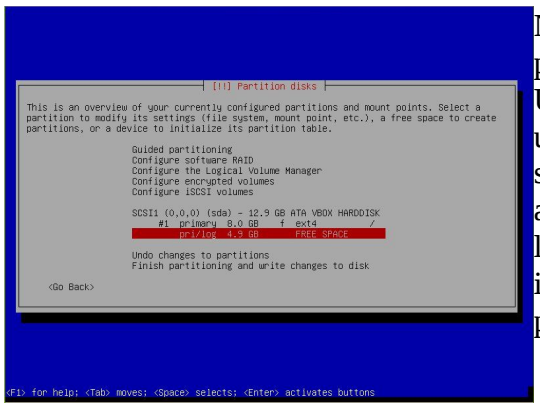

[!!] Partition disks
The maximum size for this partition is 12.9 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
40 GB
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

When your HDD is 160GB or larger, use 40GB. It'll mean you'll hardly ever have to worry about diskspace for the operating system.

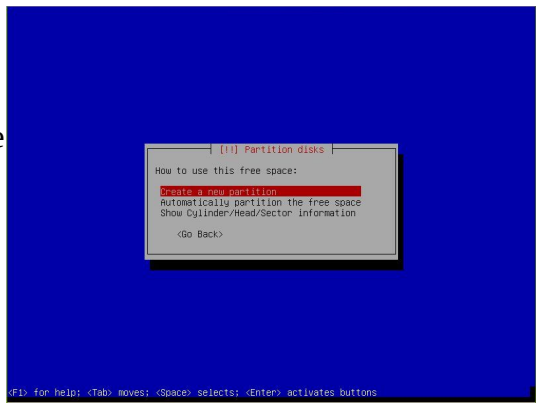


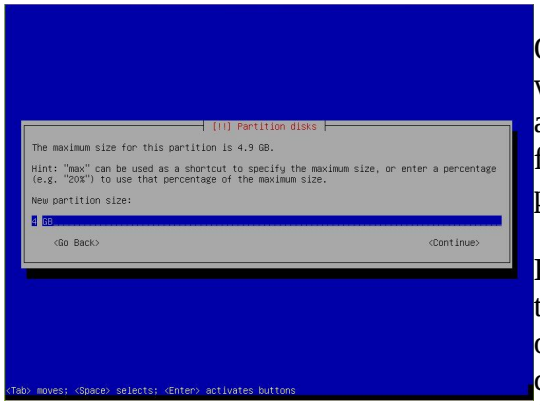

[!!] Partition disks
Please choose whether you want the new partition to be created at the beginning or at the end of the available space.
Location for the new partition:
Beginning
End
<Go Back>
<Tab> moves; <Space> selects; <Enter> activates buttons


[!!] Partition disks
You are editing partition #1 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.
Partition settings:
Use as: Ext4 journaling file system
Mount point: /
Mount options: defaults
Label: none
Reserved blocks: 5%
Typical usage: standard
Bootable flag: off
Delete the partition
Done setting up the partition
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons


[!!] Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
Configure iSCSI volumes
SCSI1 (0,0,0) (sda) - 12.9 GB ATA VBOX HARDDISK
#1 primary 8.0 GB f ext4 /
pri/log 4.9 GB FREE SPACE
Undo changes to partitions
Finish partitioning and write changes to disk
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

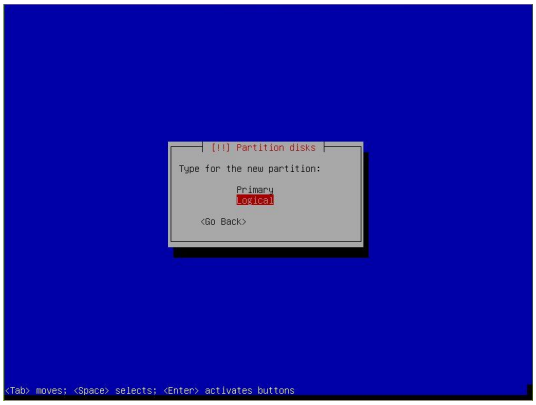
Next we create a partition for the Users. All the users files will be stored there, and also programs like Steam will install their programs here.

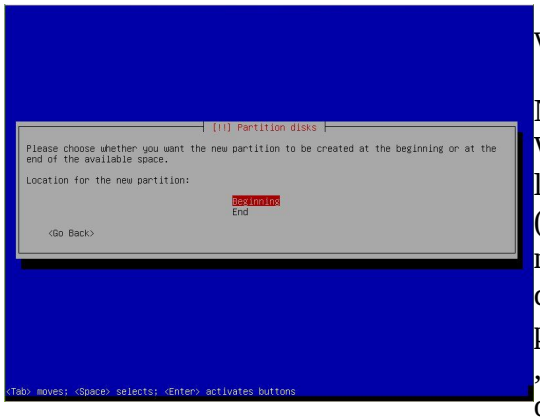

[!!] Partition disks
How to use this free space:
Create a new partition
Automatically partition the free space
Show Cylinder/Head/Sector information
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons


[!!] Partition disks
The maximum size for this partition is 4.9 GB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
4 GB
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

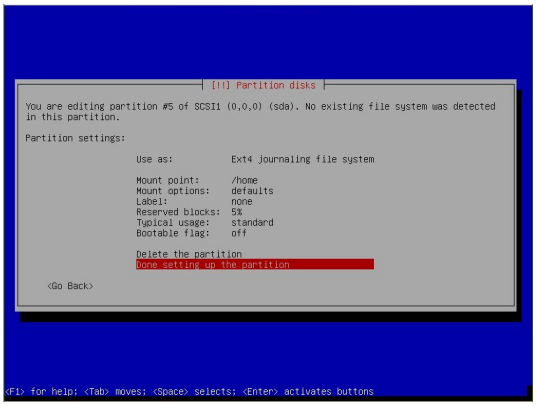
On average you will want to have as much space for the users as possible.

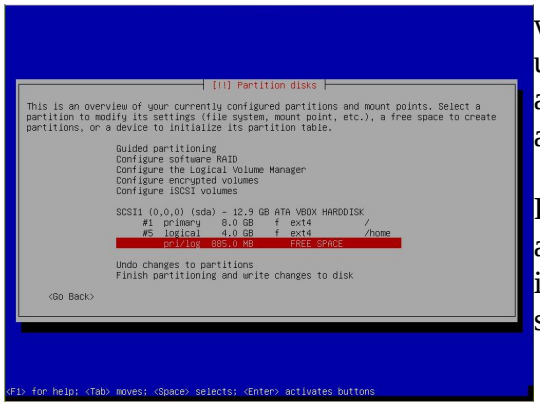
However, leave twice the amount of your computers RAM free on the HDD. You'll see soon why.




[!!] Partition disks
Please choose whether you want the new partition to be created at the beginning or at the end of the available space.
Location for the new partition:
Beginning
End
<Go Back>
<Tab> moves; <Space> selects; <Enter> activates buttons

Note:
When you have a large harddrive (>500GB) you might wish to create a separate partition under „/media/data“ or „/srv“ to store multimedia-files which also other users might be allowed to access.


[!!] Partition disks
You are editing partition #5 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.
Partition settings:
Use as: Ext4 journaling file system
Mount point: /home
Mount options: defaults
Label: none
Reserved blocks: 5%
Typical usage: standard
Bootable flag: off
Delete the partition
Done setting up the partition
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons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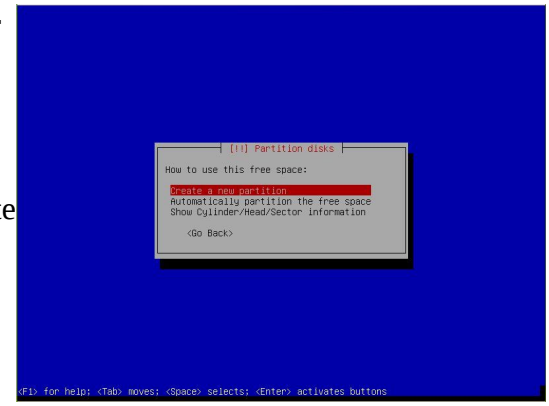
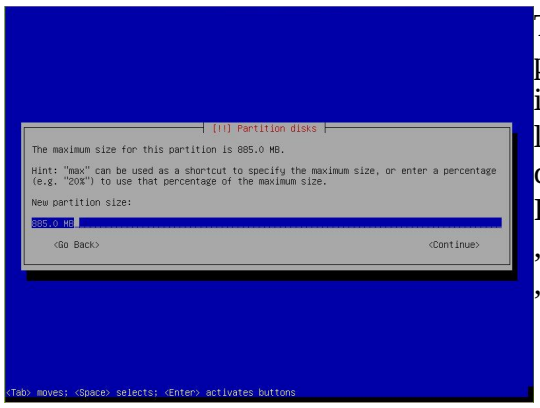
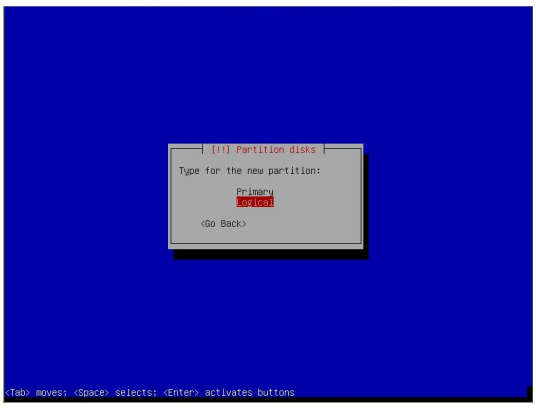
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
Configure iSCSI volumes
SCSI1 (0,0,0) (sda) - 12.9 GB ATA VBOX HARDDISK
#1 primary 8.0 GB f ext4 /
#5 logical 4.0 GB f ext4 /home
pri/log 885.0 MB FREE SPACE
Undo changes to partitions
Finish partitioning and write changes to disk
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

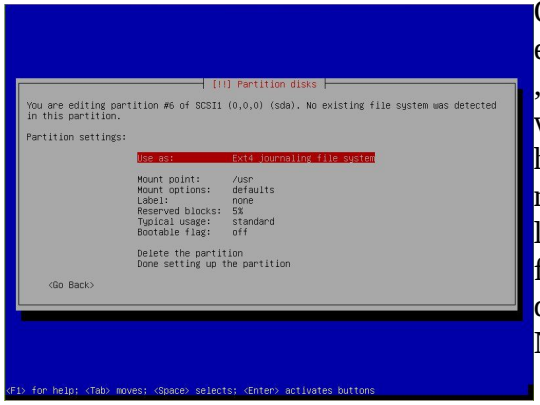
Finally, we create a third partition in the remaining space available.


[!!] Partition disks
How to use this free space:
Create a new partition
Automatically partition the free space
Show Cylinder/Head/Sector information
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

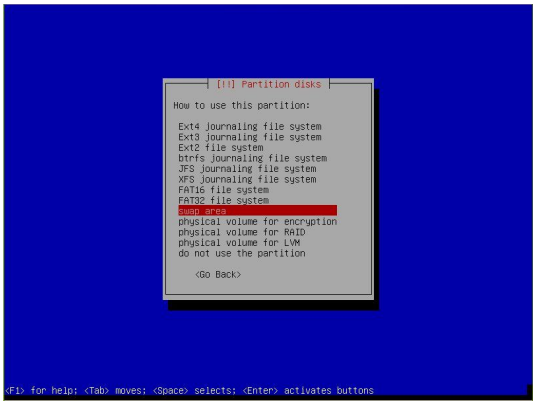

[!!] Partition disks
The maximum size for this partition is 885.0 MB.
Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.
New partition size:
885.0 MB
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

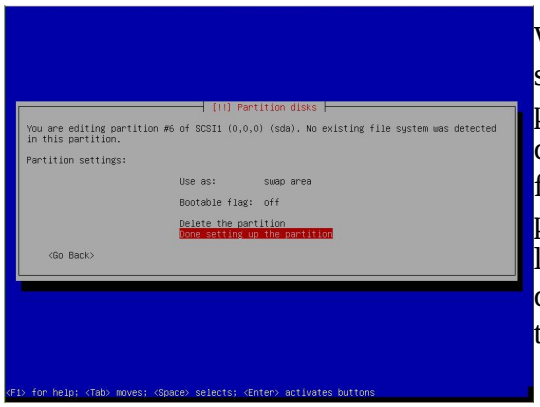
This thisr partition is, ideally, twice as large as your computers RAM. It is so-called „swap space“ or „virtual RAM“.



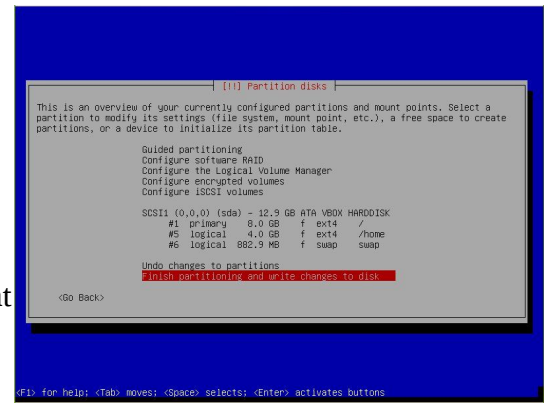

[!!] Partition disks
You are editing partition #6 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.
Partition settings:
Use as: Ext4 journaling file system
Mount point: /usr
Mount options: defaults
Label: none
Reserved blocks: 5%
Typical usage: standard
Bootable flag: off
Delete the partition
Done setting up the partition
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

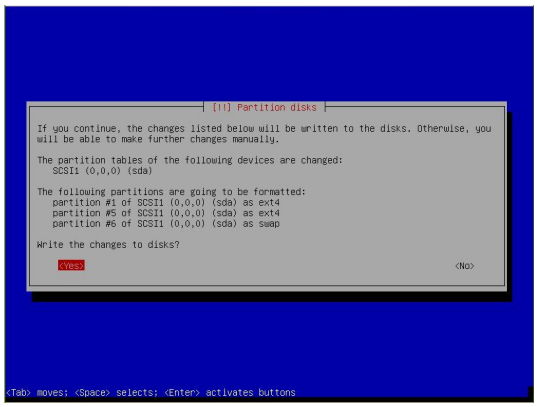
On Windows, the equivalent is the „pagefile.sys“, which is, however, responsible for a lot of disk-fragmentation on drive C.
Not so on Linux.



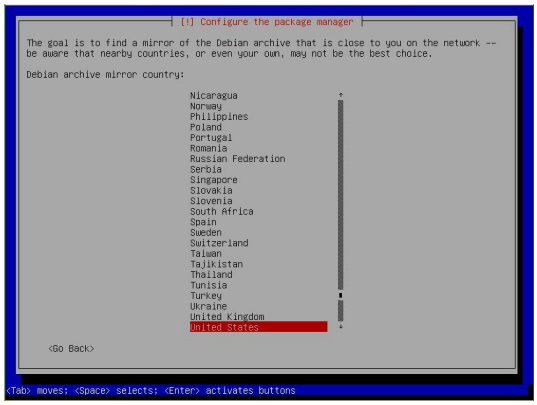

[!!] Partition disks
You are editing partition #6 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.
Partition settings:
Use as: swap area
Bootable flag: off
Delete the partition
Done setting up the partition
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

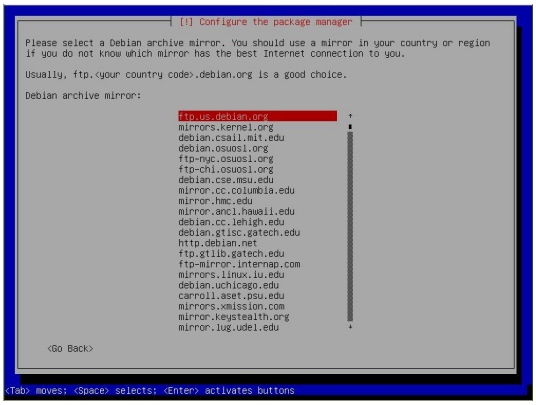
With all the standard partitions configured, we finalize the partitioning and let the system create and format the partitions.

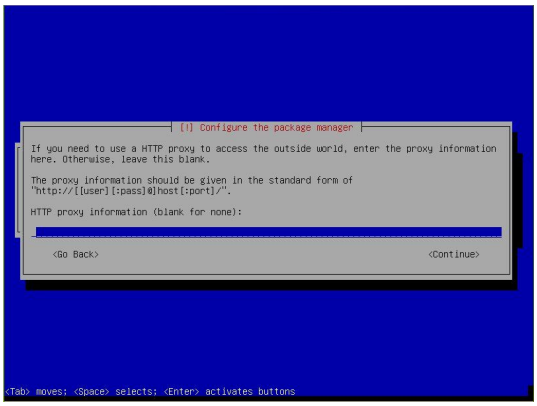

[!!] Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
Configure iSCSI volumes
SCSI1 (0,0,0) (sda) - 12.9 GB ATA VBOX HARDDISK
#1 primary 8.0 GB f ext4 /
#5 logical 4.0 GB f ext4 /home
#6 logical 882.9 MB f swap swap
Undo changes to partitions
Finish partitioning and write changes to disk
<Go Back>
<F1> for help; <Tab> moves; <Space> selects; <Enter> activates buttons

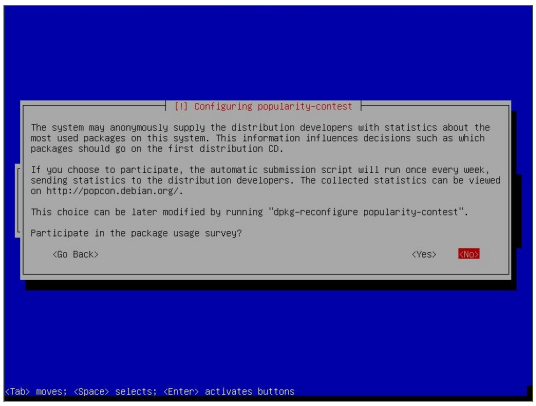

[!!] Partition disks
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed:
SCSI1 (0,0,0) (sda)
The following partitions are going to be formatted:
partition #1 of SCSI1 (0,0,0) (sda) as ext4
partition #5 of SCSI1 (0,0,0) (sda) as ext4
partition #6 of SCSI1 (0,0,0) (sda) as swap
Write the changes to disks?
<Yes>
<No>
<Tab> moves; <Space> selects; <Enter> activates buttons

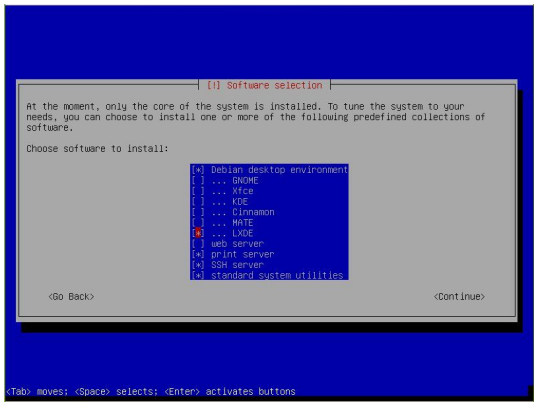
Software Installation Setup






[!] Configure the package manager
If you need to use a HTTP proxy to access the outside world, enter the proxy information here. Otherwise, leave this blank.
The proxy information should be given in the standard form of "http://[[user][:pass]@]host[:port]/".
HTTP proxy information (blank for none):
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

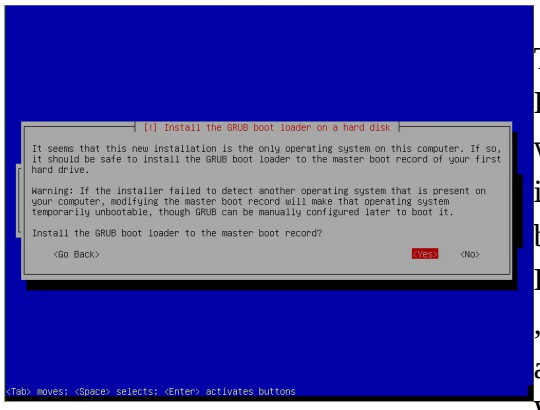

[!] Configuring popularity-contest
The system may anonymously supply the distribution developers with statistics about the most used packages on this system. This information influences decisions such as which packages should go on the first distribution CD.
If you choose to participate, the automatic submission script will run once every week, sending statistics to the distribution developers. The collected statistics can be viewed on http://popcon.debian.org/.
This choice can be later modified by running "dpkg-reconfigure popularity-contest".
Participate in the package usage survey?
<Go Back>
<Yes>
<No>
<Tab> moves; <Space> selects; <Enter> activates buttons

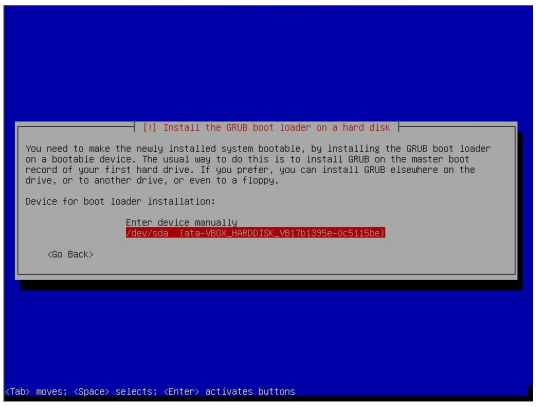

[!] Software selection
At the moment, only the core of the system is installed. To tune the system to your needs, you can choose to install one or more of the following predefined collections of software.
Choose software to install:
[*] Debian desktop environment
[ ] ... GNOME
[ ] ... Xfce
[ ] ... KDE
[ ] ... Cinnamon
[ ] ... MATE
[*] ... LXDE
[ ] web server
[*] print server
[*] SSH server
[*] standard system utilities
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

For the software installation setup we have to select a so-called „software repository“. That is those servers containing updates and additional software. We select one that's in our country. The default one usually does fine. In a home-setup no proxy is needed, and there is no need to participate in the „popularity contest“, which is a tool to help optimize the default setup for the next release by finding out what people actually do use on their systems on a statistical level.

Finally, we select our desktop and a few additional „function-packages“. Instead of LXDE you can select KDE when your PC is pretty beefy, or any of the other listed Desktops when you like new experiences.

Final Steps: Installing the Bootloader


[!] Install the GRUB boot loader on a hard disk
It seems that this new installation is the only operating system on this computer. If so, it should be safe to install the GRUB boot loader to the master boot record of your first hard drive.
Warning: If the installer failed to detect another operating system that is present on your computer, modifying the master boot record will make that operating system temporarily unbootable, though GRUB can be manually configured later to boot it.
Install the GRUB boot loader to the master boot record?
<Go Back>
<Yes>
<No>
<Tab> moves; <Space> selects; <Enter> activates buttons


[!] Install the GRUB boot loader on a hard disk
You need to make the newly installed system bootable, by installing the GRUB boot loader on a bootable device. The usual way to do this is to install GRUB on the master boot record of your first hard drive. If you prefer, you can install GRUB elsewhere on the drive, or to another drive, or even to a floppy.
Device for boot loader installation:
Enter device manually
/dev/sda (ata-VBOX_HARDDISK_VB17b1395e-0c5115be)
<Go Back>
<Tab> moves; <Space> selects; <Enter> activates buttons

[!!] Finish the installation
Installation complete
Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media (CD-ROM, floppies), so that you boot into the new system rather than restarting the installation.
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

To start our Linux system, we need to install the bootloader. The Bootloader „Grub“ is also able to start Windows if needed. And when it was isntalled at the time we isntalled Linux.

Thus: Always install Windows first when you want a dual-boot system.

The second option listed is, assuming a single-HDD system, normally the correct one. Typically it should read something like „/dev/sda“.

After that, we can finish the installation and reboot into the new system.

Finally: Booting the new system!

Now we use the username and the user's password to log into the desktop.

Our new shiny Debian 8.0 „Jessie“ with (in this case) an LXDE Desktop awaits us!

First Install: Little Helpers

Now, on the LXDE desktop, we press LALT-F2 to open the “mini-terminal”, and enter “lxterminal” – that's LXDEs standard terminal.
Next, in the new terminal window:

delock@debian:~$ su
Password:
root@debian:/home/delock# apt-get install gpm synaptic gparted clamtk screen

This installs:
gpm (gives us a mousecursor even on the text-terminals)
synaptic (graphical package installations)
gparted (to modify partitionsizes)
clamtk (virusscanner, mostly for Windows maintenance)
screen (allows us in the shell to „detach“ from a running program, helpful for terminal-multitasking with SSH logins)

Software-Repositories: Where we get new software from

There is a lost of software available. However, as per Debian's default, there is no software with any type of „restrictive“ license available. That is morally all fine and high, but we are groundhogs and the systems are not for educational purposes, but for work and play.
So we add additional software-repositories to the software-management-system's list:

root@debian:/home/delock# nano /etc/apt/sources.list

In nano, behind every line ending with “main” we add “contrib non-free”
so that the resulting lines look similar to this (which is the first line I changed) :

deb http://ftp.us.debian.org/debian/ jessie main contrib non-free

This allows Debian to also use online-repositories which contain software which is under copyright, such as the Adobe Flashplayer.
There is an additional repository with special multimedia-software available.
You can add that at the end of the sources.list file – I didn't do this on the USB-HDD yet:

deb http://www.deb-multimedia.org jessie main non-free

Add an empty line after this line.

Now we need to inform our Linux of the changes by telling the software manager to fetch / update the list of available software:

root@debian:/home/delock# apt-get update

We'll get an error message, as the new repository we added in the last line uses an unknown security-key. As I didn't do this on the USB-HDD, the following steps would need to be done, too. So, we add that key by installing the repositories „keyring“:

root@debian:/home/delock# apt-get install deb-multimedia-keyring

With the security-key now installed, we can re-do the updating of the repositories index:

root@debian:/home/delock# apt-get update

This should finish without any errors now.

Firmware – Driver's little helpers

Once that command has finished updating the list of online-repositories, we look for the “Firmware” to enable all the hardware-drivers in the linux-kernel to work properly.
Some hardware or it's drivers needs firmware to operate properly.
So we do:

root@debian:/home/delock# apt-cache search firmware-

We tell the software-management utility apt to perform a task in the cache, the index of all software available, which was created before by “apt-get update”. Namely, we order it to search for all packets carrying “firmware-” in their name.
This happens to be all the firmware we normally want. There might be doubles as some firmwares are in the process of being updated, meaning there is an older and a newer version available. For Debian Jessie, all relevant firmware packets start with “firmware-”.
There is one particular exception:
There is the “firmware-b43legacy-installer”, which, as the name implies, is a legacy item.
It is needed only in older server mainboards, and should be skipped, and instead the “firmware-b43-installer” should be used, resulting in this command:

root@debian:/home/delock# apt-get install firmware-zd1211 libertas-firmware firmware-ti-connectivity firmware-samsung firmware-realtek firmware-ralink firmware-qlogic firmware-netxen firmware-myricom firmware-linux-nonfree firmware-linux firmware-libertas firmware-iwlwifi firmware-ivtv firmware-ipw2x00 firmware-intelwimax firmware-brcm80211 firmware-bnx2x firmware-bnx2 firmware-atheros firmware-adi firmware-crystalhd dahdi-firmware-nonfree firmware-linux-free firmware-b43-installer

This will install also a pack of additional software, support-tools mostly.
There might be – there is a legal issue ongoing these days – a firmware for AppleTV hardware by the time you repeat these steps.
In that case, there might arise during installation of the firmware the question if you „have the original driver ready“. Most likely you gleefully will say „no“ and skip installation of that particular firmware.
After the next reboot, most pluggable hardware such as wlan-adapters will work straight away.

Flashplayer & Windows Fonts

What we most likely want, too, is the flash-player to use the majority of multimedia-websites, as

well as the standard fonts Windows uses, as to be able to view documents exactly the same way as under Windows:

root@debian:/home/delock# apt-get install flashplugin-nonfree ttf-mscorefonts-installer

Graphical audio-configuration utility

Adding the Volume-Control to the taskbar is done by right-clicking onto the taskbar, selecting “add/remove panel items”, then in the “panel applets” tab selecting “add” and then selecting the “Volume Control”. It`s position in the taskbar we shift using the up/down buttons.

To get a nicer audio-system management module than the default one, I typed:

root@debian:/home/delock# apt-cache search pulseaudio

and – knowing after years of using them – selected for installation:

root@debian:/home/delock# apt-get install paman padevchooser paprefs pavucontrol

These components allow us to select also plugged-in hardware (Webcam microphones, USB-headsets) and have a nicer volume control and configuration utility.

Skype and 32Bit software compatibility

From here on, Debian would be ready to run, if not for Skype.
We need to download Skype for Debian manually from Skype.com => Downloads => “Debian 7 Multiarch”.
We use Debian 8, but that`s of little consequence, luckily, but the “Multiarch” is.
Debian 64Bit is exactly that – by default there is no 32Bit backward-compatibility installed.
I downloaded Skype to the “Downloads” folder. Now, we try to install it:

root@debian:/home/delock/Downloads# dpkg -i skype-debian_4.3.0.37-1_i386.deb

dpkg: error processing archive skype-debian_4.3.0.37-1_i386.deb (--install):
package architecture (i386) does not match system (amd64)
Errors were encountered while processing:
skype-debian_4.3.0.37-1_i386.deb

The i386 architecture is for the old 32Bit systems.

Now, we need to tell our Debian to activate and install 32Bit compatibility:

root@debian:/home/delock/Downloads# dpkg --add-architecture i386

And now we need to tell Debian to again update the list of available Software:

root@debian:/home/delock/Downloads# apt-get update

With that task done, we again try to install skype:

root@debian:/home/delock/Downloads# dpkg -i skype-debian_4.3.0.37-1_i386.deb
Selecting previously unselected package skype.
(Reading database ... 103004 files and directories currently installed.)
Preparing to unpack skype-debian_4.3.0.37-1_i386.deb ...
Unpacking skype (4.3.0.37-1) ...
dpkg: dependency problems prevent configuration of skype:
skype depends on libc6 (>= 2.3.6-6~).
skype depends on libc6 (>= 2.7).
skype depends on libgcc1 (>= 1:4.1.1).
skype depends on libqt4-dbus (>= 4:4.5.3).
skype depends on libqt4-network (>= 4:4.8.0).
skype depends on libqt4-xml (>= 4:4.5.3).
skype depends on libqtcore4 (>= 4:4.7.0~beta1).
skype depends on libqtgui4 (>= 4:4.8.0).
skype depends on libqtwebkit4 (>= 2.1.0~2011week13).
skype depends on libstdc++6 (>= 4.2.1).
skype depends on libx11-6.
skype depends on libxext6.
skype depends on libxss1.
skype depends on libxv1.
skype depends on libssl1.0.0.
skype depends on libpulse0.
skype depends on libasound2-plugins.

dpkg: error processing package skype (--install):
dependency problems - leaving unconfigured
Processing triggers for dbus (1.8.12-3) ...
Processing triggers for desktop-file-utils (0.22-1) ...
Processing triggers for mime-support (3.58) ...
Processing triggers for hicolor-icon-theme (0.13-1) ...
Errors were encountered while processing:
skype

This tells us that Skype needs additional software to be installed.
We used dpkg to install, and dpkg has zero intuition of it`s own.
So, instead of installing all that software now by hand we again use the main software management system apt to do the job for us:

root@debian:/home/delock/Downloads# apt-get install -f

Apt now installs a lot of software. All of it 32Bit software needed to run Skype.
However, with this step the system is now able to handle both 32 as well as 64 bit programs without any further intervention.

Other Things: Nvidia driver

What is still missing is to install the nvidia graphicsdriver in case the system is using an nvidia graphicscard.
Clearly, as this USB-emergency-system is built with the idea of compatibility over performance, I

leave that out. This way the system will always choose the most compatible graphicsdriver, which might not be the best, but will work in most cases.
To install the driver, the user-configuration-utility and a small helper-program, do this:

root@debian:/home/delock/Downloads# apt-get install nvidia-driver nvidia-xconfig nvidia-settings

After installation execute nvidia-xconfig as root once. It'll configure the system to use the driver.

Post-Installation-Log:

apt-get install gpm screen synaptic gparted clamtk
apt-cache search firmware
nano /etc/apt/sources.list
apt-get update
apt-get install deb-multimedia-keyring
apt-get update
apt-cache search firmware-
apt-get install firmware-zd1211 libertas-firmware firmware-ti-connectivity firmware-samsung firmware-realtek firmware-ralink firmware-qlogic firmware-netxen firmware-myricom firmware-linux-nonfree firmware-linux firmware-libertas firmware-iwlwifi firmware-ivtv firmware-ipw2x00 firmware-intelwimax firmware-brcm80211 firmware-bnx2x firmware-bnx2 firmware-atheros firmware-adi firmware-crystalhd dahdi-firmware-nonfree firmware-linux-free firmware-b43-installer
apt-cache search flashplayer
apt-get install flashplugin-nonfree ttf-mscorefonts-installer
apt-cache search pulseaudio
apt-get install paman padevchooser paprefs pavucontrol
ls
ls Downloads/
cd Downloads/
ls
dpkg -i skype-debian_4.3.0.37-1_i386.deb
dpkg --add-architecture i386
apt-get update
dpkg -i skype-debian_4.3.0.37-1_i386.deb
apt-get install -f
apt-get install memtest86 # To use the USB drive for memorytesting
apt-get install k3b audacity pidgin icedove mesa-utils # CD/dvd burning and some overall tools (Audiorecording, IM, Email, 3d-test)
exit